BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT
SINCE 1955



June 29, 2007

Darryl Boyd, Principal Planner
Department of Planning, Building, and Code Enforcement
200 East Santa Clara Street
San Jose, CA 95113-1905

Subject: Coyote Valley Specific Plan Draft Environmental Impact Report

Dear Mr. Boyd:

Bay Area Air Quality Management District (District) staff have reviewed the draft Coyote Valley Specific Plan (CVSP) and the Draft Environmental Impact Report (DEIR) for the CVSP. We understand that the CVSP proposes developing approximately 3,800 acres of rural land in southern San Jose with approximately 26,400 residential units and 50,000 new jobs. This proposed community is projected to have a population of approximately 70,000 to 80,000 people. The CVSP is proposed as a transit and pedestrian oriented development that contains a "development pattern that can substantially reduce the energy consumption and pollution caused by the automobile through emphasis on walking, biking, and transit" (CVSP, p. 29). The guiding principals state that the CVSP will "...represent a model of planning and design for environmentally friendly and economically self-sustaining communities" (CVSP, p. 27). We commend the goal of creating a sustainable community. We have the following comments on the DEIR.

**Long-Term Operational Air Quality Impacts**

Operational Impacts. Impact AQ-3 accurately characterizes the significance of the CVSP's long term operational air quality impacts from on-road vehicles as significant and unavoidable. We have identified additional feasible operational mitigation measures below that will further reduce the magnitude of this impact. We recommend that these mitigation measures be included in the final EIR and added to the CVSP as policies. There may be additional feasible measures. We urge the City to aggressively pursue all opportunities to reduce air quality impacts of the CVSP.

Impact AQ-5 concludes that build-out of the project would not result in exposure to the public to substantial levels of toxic air contaminant (TAC) emissions. In part, the basis for this conclusion rests upon California Air Resources Board's (CARB) guidance provided in the *Air Quality and Land Use Handbook* (April 2005) to not locate sensitive receptors within 500 feet of heavily traveled roadways, such as US 101. In the handbook CARB provides general guidance for a variety of locations and recognizes that "...these recommendations are advisory and should not be interpreted as defined 'buffer zones.' We recognize the opportunity for more detailed site-specific analyses always exists, and that there is no 'one size fits all' solution to land use planning" (CARB Handbook, p. 3).

With the preparation and refinement of the CVSP, the City of San Jose has the opportunity to provide a more detailed site-specific analysis. We recommend that a health risk assessment (HRA) be prepared to determine the adequacy of the proposed distance of sensitive receptors from US 101 in limiting exposure to TAC. The results of the HRA should be indicated on CVSP land use plans by demarking the boundary of exposures resulting in increased cancer risk of 10 in a million from this roadway. Policies should be added to the CVSP that avoid locating sensitive land uses in these areas. These new policies should also require analysis of health risk when sensitive receptors are proposed within a quarter-mile of existing or planned uses that may include distribution centers, loading docks or other sources of diesel emissions or other TAC, and where sources of TAC are proposed within a quarter-mile of sensitive receptors.

Impact AQ-6 states that the proposed project is not consistent with the population projections in the 2005 Ozone Strategy and, therefore, the project will have a significant unavoidable impact on long-term regional air quality. We recommend that the final EIR quantify projected population and vehicle miles traveled (VMT) growth rates for the CVSP. We consider a plan to have a significant impact when VMT increases at a faster rate than population or when population increases at a greater rate than is assumed in the ozone strategy. This information will be helpful in assessing air quality impacts and how well the CVSP is able to meet its goals as a transit and pedestrian oriented community.

Operational Mitigation. Amended and additional mitigation measures are needed to further reduce the significant unavoidable operational impacts to the maximum extent feasible. The District finds that the following amended and new mitigation measures are feasible and should be included in the final EIR and as policies of the CVSP. We recommend the following changes (deletion by strikethrough, addition by underline) to the proposed air quality mitigation measures. We also urge the City to investigate additional mitigation measures.

MM AQ-3.2 and 6.2: Bicycle amenities shall be provided on each project development site. ~~Each site will be reviewed and appropriate bicycle amenities shall be included. As appropriate, t~~ This shall include secure bicycle parking for office and retail employees, bicycle racks for retail customers and bike lane connections throughout each project site.

MM AQ-3.4 and 6.4: We recommend that this measure be enhanced by requiring a free shuttle bus service that provides 20 minute headways between 7:00 am and 6:00 pm.

MM AQ-3.5 and 6.5: This measure recommends that "All feasible and reasonable Transportation Demand Management program measures shall be implemented." We recommend that this measure be enhanced by identifying what specific criteria will be used to determine which TDM measures are feasible and reasonable.

MM AQ-3.6: This mitigation measure requires that fireplaces installed in residences comply with the City's Wood-Burning Appliance Ordinance. We recommend that this measure be replaced with a measure that prohibits the installation of any wood-burning appliance in new structures or outdoor areas.

New Measure: All residential, commercial and office parking garages or facilities shall provide infrastructure to allow for easy installation of electric vehicle charging facilities.

New Measure: All residential, commercial and office buildings shall include a solar energy component that provides a minimum of 50% of the energy needs.

New Measure: All new buildings shall exceed Title 24 energy standards.

New Measure: All new buildings shall be "Platinum Certified" under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

New Measure: All commercial and industrial loading areas/docks shall be electrified and diesel truck idling shall be prohibited in these areas.

**Construction Air Quality Impacts**

Construction: Toxic Air Contaminant (TAC) Exposure Impacts. Impact AQ-2 (Impacts Associated with the use of diesel-powered construction equipment) should be worded to make it clear that this impact analysis describes adverse exposure to diesel particulate matter (DPM) from construction equipment exhaust, such as "Toxic air contaminant impacts from exposure to diesel-powered equipment exhaust." Impact AQ-2 concludes that impacts associated with the use of diesel-powered construction equipment within the CVSP development area would be less than significant. However, the analysis of DPM does not adequately or accurately characterize this potentially adverse air quality impact, as required by State CEQA Guidelines (SCG) Section 15026.2, and does not meet the intent of CEQA to disclose to the public and decision makers, and to identify and prevent significant, avoidable adverse impacts (SCG §15002). In support of this less than significant conclusion, the DEIR assumes that construction will occur at varying distances from sensitive receptors and at a short duration at any one location (DEIR, p. 212). These assumptions are vague and do not consider specific projects in the CVSP that may occur near or adjacent to sensitive receptors, that may require longer construction periods, or the cumulative impacts of concurrent construction activity at multiple sites.

To protect future sensitive receptors from the adverse health effects of diesel exhaust and other TAC, we recommend that policies be added to the CVSP that would require an HRA when sensitive receptors are located within a quarter-mile of a proposed construction site. The HRA should consider TAC emissions from both the proposed construction site and other active or proposed construction sites, and other sources of TAC such as a freeway or stationary sources of emissions, within a quarter-mile of any sensitive receptors. These policies should also require that significant adverse risk exposure from TAC be mitigated prior to the start of any construction project.

Construction: TAC Exposure Mitigation. The DEIR should require that feasible mitigation measures for this potentially significant impact be made conditions of approval, and policies added to the CVSP, that require the reduction of construction-related DPM emissions and exposure. Feasible project-level mitigation measures include: utilizing alternative fuel construction equipment such as CNG, biodiesel, and electric; using diesel construction equipment that meet or exceed CARB's most recent certification standards for off-road heavy-duty diesel engines at the time of construction; requiring particulate matter filters on diesel construction equipment that do not meet CARB's most recent certification standards; limiting the hours of operation of heavy-duty equipment; and designating truck routes that avoid sensitive receptors. In addition, the CVSP should include a green contracting policy that requires contractors to procure and operate low-emission vehicles and equipment.

Construction: Criteria Pollutant Impacts. Build-out of the project is expected to occur over a 25–50 year timeframe (DEIR, p. 14). Generally we presume that construction equipment exhaust emissions of individual projects are accounted for in regional air quality plans.

However, in this case construction activity will be ongoing for decades. Therefore, this impact should not be considered "short term" as it is not typical of project impacts evaluated under our construction significance thresholds. Thus, we recommend that this impact be considered long term and compared to our operational significance thresholds. We recommend that the DEIR include a quantitative analysis of the criteria pollutant emissions that would be generated from construction equipment exhaust through build-out of the CVSP. This analysis is necessary to accurately characterize the potentially significant impacts to local and regional air quality from this activity and to develop effective mitigation measures.

Construction: Dust Impacts and Mitigation. The District concurs with the construction-related dust impact analysis (Impact AQ-1). However, the mitigation measures proposed need to be amended to ensure implementation so that dust impacts remain below the significance level. The District finds that the following amended mitigation measures are feasible and should be included in the final EIR and as policies in the CVSP. We recommend the following changes (deletion by strikethrough, addition by underline) to the proposed air quality mitigation measures:

MM AQ-1.3: All unpaved access roads, parking areas and staging areas at construction sites shall be watered three times daily and more often when conditions warrant. Alternatively, non-toxic soil stabilizers shall be applied in sufficient quantity and frequency to maintain a stabilized surface.

MM AQ-1.4: All unpaved access roads, parking areas and staging areas at construction sites shall be swept daily. No dry mechanical sweeping shall be allowed. Water sweepers shall vacuum up excess water to avoid runoff related impacts to water quality.

MM AQ-1.11: Trucks and equipment leaving construction sites shall have accumulated dirt removed from wheels~~, as needed~~. by wheel washers, rumble strips and/or a minimum of 100 linear feet of aggregate base material installed at ingress/egress points.

MM AQ-1.14: The contractor shall install temporary electrical service ~~whenever possible~~ at all construction sites to avoid the need for independently powered equipment (e.g., compressors).

**Greenhouse Gas (GHG) Impacts**

GHG Impact Analysis. We appreciate that the DEIR contains a discussion on global climate change and that the project's GHG emissions were quantified. We also agree with the statement in the CVSP DEIR that "the substantial CVSP greenhouse gas emissions will combine with emissions across California, the U.S., and the globe to cumulatively contribute to global climate change" (DEIR p. 420). In light of the recent Attorney General's letters and lawsuit regarding the adequacy of evaluating and characterizing GHG impacts in environmental impact reports, it may be appropriate for the DEIR to reconsider the significance determination of this impact and propose mitigation measures that could be incorporated in the CVSP as policies to directly reduce GHG emissions. The Attorney General's comment letter on the ConocoPhillips Rodeo Refinery Expansion Project (May 8, 2007) asserts that mitigation measures for GHG emissions of the magnitude of that project's are necessary to achieve the emission reductions mandated in the Global Warming Solutions Act (AB32). The CVSP's GHG emissions are quantified at more than 500,000 metric tons per year. The Attorney General's office appears to consider that any increase in GHG emissions from a project that are greater than the GHG emission reductions anticipated from CARB's Early Action Measures ("Proposed Early Actions

to Mitigate Climate Change in California," CARB, April 2007, p. 7-8) may constitute a significant impact under CEQA. The CVSP FEIR should recognize the potential significance of this impact and commit to implementing all feasible mitigation measures to address GHG emissions.

GHG Mitigation. The DEIR explains that many of the identified mitigation measures for energy, traffic, and air quality impacts will achieve GHG emission reductions. We recommend incorporating the DEIR's climate discussion and associated mitigation measures into the CVSP as policies that require implementation. For instance, the Energy portion of Section 8 of the CVSP (p. 122) should include mitigation measures MM EMR-1.1 through MM EMR-1.9 as policies. In addition, these mitigation measures should require, not merely promote, cool roofs, solar energy, and green building practices to conserve and reduce energy use. Mitigation cannot be assured as the policies are currently written.

The CVSP notes that the City of San Jose should prepare a Global Warming Mitigation Program for the CVSP project. The City of San Jose has demonstrated its environmental leadership through past actions including adoption of the U.S Council of Mayor's Climate Change Agreement (March 20, 2007) and the Municipal Climate Action Plan (June 5, 2007) that sets an aggressive goal to reduce GHG emissions by 35 percent by 2020. The City of San Jose is also a member of Local Governments for Sustainability's Cities for Climate Protection Campaign. We recommend that the goals and objectives of these laudable actions and programs be incorporated into the CVSP as policies in a Global Warming Mitigation Program. The CVSP should include a global warming mitigation plan that is consistent with the 35 percent reduction goal that the City seeks through its Municipal Climate Action Plan and to fulfill the CVSP guiding principals to provide global leadership, develop a sustainable community and substantially reduce vehicle miles traveled.

We recommend that you update Table 4.4-1, Major Criteria Air Pollutants and Standards, with the correct state and federal ambient air quality standards information. The table currently has several errors and does not list all the state and federal ambient air quality standards. A correct table for your use is attached to this letter. You may also visit our website to see the table at http://www.baaqmd.gov/pln/air_quality/ambient_air_quality.htm.

Please contact Greg Tholen, Senior Environmental Planner, at (415) 749-4954 or at gtholen@baaqmd.gov, if you have any questions regarding these comments.

Sincerely,

for

Jean Roggenkamp
Deputy Air Pollution Control Officer

JR:GT

cc: BAAQMD Director Erin Garner
BAAQMD Director Yoriko Kishimoto
BAAQMD Director Liz Kniss
BAAQMD Director Patrick Kwok

Attachment: Ambient Air Quality Standards

# Attachment

Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards[1] | | National Standards[2] | |
|---|---|---|---|---|---|
| | | Concentration | Attainment Status | Concentration[3] | Attainment Status |
| Ozone | 8 Hour | 0.070 ppm (137 µg/m³) | U[9] | 0.08 ppm | N[4] |
| | 1 Hour | 0.09 ppm (180 µg/m³) | N | | [5] |
| Carbon Monoxide | 8 Hour | 9.0 ppm (10 mg/m³) | A | 9 ppm (10 mg/m³) | A[6] |
| | 1 Hour | 20 ppm (23 mg/m³) | A | 35 ppm (40 mg/m³) | A |
| Nitrogen Dioxide | 1 Hour | 0.18 ppm (338 µg/m³) | A | | |
| | Annual Arithmetic Mean | 0.030 ppm (56 µg/m³) | | 0.053 ppm (100 µg/m³) | A |
| | 24 Hour | 0.04 ppm (105 µg/m³) | A | 0.14 ppm (365 µg/m³) | A |
| Sulfur Dioxide | 1 Hour | 0.25 ppm (655 µg/m³) | A | | |
| | Annual Arithmetic Mean | | | 0.030 ppm (80 µg/m³) | |
| Particulate Matter (PM10) | Annual Arithmetic Mean | 20 µg/m³ | N[7] | | |
| | 24 Hour | 50 µg/m³ | N | 150 µg/m³ | U |
| Particulate Matter - Fine (PM2.5) | Annual Arithmetic Mean | 12 µg/m³ | N[7] | 15 µg/m³ | A |
| | 24 Hour | | | 35 µg/m³ See Footnote 10 | U |
| Sulfates | 24 Hour | 25 µg/m³ | A | | |
| Lead | Calendar Quarter | | | 1.5 µg/m³) | A |
| | 30 Day Average | 1.5 µg/m³) | A | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/m³ | U | | |
| Vinyl Chloride (chloroethene) | 24 Hour | 0.010 ppm (26 µg/m³ | No information available | | |
| Visibility Reducing particles | 8 Hour(1000 to1800 PST) | See Footnote 8 | A | | |

**A=Attainment N=Nonattainment U=Unclassified**

mg/m³=milligrams per cubic meter ppm=parts per million µg/m³=micrograms per cubic meter

## NOTES

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM10, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM10 annual standard), then some measurements may be excluded. In particular, measurements are excluded that ARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.
2. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.08 ppm or less. The 24-hour PM10 standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m3. The 24-hour PM2.5 standard is attained when the 3-year average of 98th percentiles is less than 65 µg/m3. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM10 is met if the 3-year average falls below the standard at every site. The annual PM2.5 standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
3. National air quality standards are set at levels determined to be protective of public health with an adequate margin of safety.
4. In June 2004, the Bay Area was designated as a marginal nonattainment area of the national 8-hour ozone standard.
5. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.
6. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.
7. In June 2002, CARB established new annual standards for PM2.5 and PM10.
8. Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
9. This standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006.
10. U.S EPA lowered the 24-hour PM2.5 standard from 65 µg/$m^3$ to 35 µg/$m^3$ in 2006. EPA is required to designate the attainment status of BAAQMD for the new standard by December of 2009.

Contact
David Burch (415)749-4641 dburch@baaqmd.gov

Updated 1/4/2007